Bureau of Land Management, Buffalo Field Office
Beebe Allotment Grazing Lease Transfer
Environmental Assessment (EA), WY-070-EA11-300

1.0 Introduction

PROJECT TITLE: Beebe Allotment 10-Year Term Grazing Lease Transfer and Issuance

LOCATION: Beebe Allotment (02478): T45N, R86W, Section 23 E½SE¼, Sec.24: SW¼SW¼, SE¼SE¼, Sec.25: W½NW¼, Sec.26: E½NE¼., 320 acres of public land. *(see attached map)*

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CASEFILE NUMBER: 4907684

APPLICANT: Beebe, LLC

This site-specific EA tiers to and incorporates by reference the Buffalo Resource Management Plan (RMP) dated October 4, 1985, and the 2001 amendment. This EA follows the format in Chapter 8 of the BLM National Environmental Policy Act Handbook, H-1790-1.

1.1 Background

Mike Curuchet transferred his base property to Beebe, LLC. Beebe, LLC applied for transfer of the grazing privileges attached to this property and a new lease authorizing grazing on the Beebe Allotment. Per 43 CFR 4110, Beebe, LLC has preference in obtaining the grazing privileges attached to this property.

1.2 Purpose and Need for the Proposed Action

The BLM promotes healthy sustainable rangeland ecosystems and provides for the sustainability of the western livestock industry and communities that are dependent upon productive, healthy public rangelands while complying with land use plans and multiple use objectives, including environmental and economic values, as provided in 43 CFR 4100, the Taylor Grazing Act of 1934 and the Federal Land Policy and Management Act (FLPMA) of 1976. The proposed action would allow livestock grazing on public land through the exercise of grazing preference attached to controlled base property while considering these multiple use objectives (43 CFR 4110).

There is need for the action due to the requirement that an individual or group desiring to graze livestock on public land must hold a valid grazing authorization in the form of a permit or lease; the BLM is to balance the authorization with other uses of public land. The current grazing lessee has a preference to receive the authorization if grazing is to continue on the associated allotment. The BLM issued the current grazing lease in 2010 under Public Law 106-291 allowing for authorization of grazing leases until completion of environmental analysis.

1.3 Decision to be Made

The BLM will decide whether or not to transfer the grazing preference on the Beebe Allotment from Mike Curuchet to Beebe, LLC, whether or not to issue a grazing lease with no change in

terms and conditions to Beebe, LLC for the Beebe Allotment, and how to balance the proposed action with multiple public uses.

1.4 Conformance with Land Use Plan and Other Laws, Regulations, and Policies

The proposed action conforms to the record of decision (ROD) for the Buffalo Resource Management Plan (RMP) approved October 4, 1985, the 2001, 2011 amendments, and the Powder River Basin Oil & Gas Project Final Environmental Impact Statement and Resource Management Plan Amendment (PRB FEIS) approved April 30, 2003. The action is also consistent with the land use plan terms and conditions as required by 43 CFR 1610.5-3(a). The Buffalo RMP EIS analyzed the impacts of grazing.

This EA fulfills the NEPA requirement for site-specific analysis. The proposed action is in accordance with the following laws and/or regulations, other plans, and is consistent with federal, state, and local laws, regulations:

- Taylor Grazing Act of June 30, 1934
- Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.)
- Public Rangelands Improvement Act of 1978
- Endangered Species Act of 1973
- 43 CFR § 4100 Grazing Administration-Exclusive of Alaska
- Clean Water Act Section 303d
- National Historic Preservation Act of 1966 Section 106
- National Environmental Policy Act of 1969
- Sikes Act of 1969 (Habitat Improvement on Public Land)
- Fish and Wildlife Improvement Act of 1978
- Executive Order 13186 – Responsibilities of Federal Agencies to Protect Migratory Birds
- Grazing Regulations as codified in 43 CFR § 4100 as amended in 2005
- BLM Instruction Memorandum No. WY-2010-012, Greater Sage-Grouse Habitat Management Policy on Wyoming BLM Administered Public Lands including the Federal Mineral Estate (Maintained into the Buffalo RMP)
- DOI Secretarial Order No.3310—Protecting Wilderness Characteristics on Lands Managed by the BLM, Dec. 2010

1.4.1 Wyoming Standards for Rangeland Health

Particularly applicable to livestock grazing management by the BLM are the Wyoming Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management. The Secretary of the Interior developed and approved the Standards and Guidelines on August 12, 1997. They address watersheds, ecological condition, water quality and habitat for special status species. These policies and guidelines are critical to achieving ecologically sustainable range management.

The regulation at 43 CFR 4180.1 details four fundamentals of rangeland health. They are:

1. Watersheds are in or are making progress toward properly functioning physical condition, including their upland, riparian-wetland, and aquatic components; soil and plant conditions support water infiltration, soil moisture storage, and the release of water that

are in balance with climate and landform and maintain or improve water quality, water quantity, and timing and duration of flow.

2. Ecological processes including the hydrologic cycle, nutrient cycle, and energy flow are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.

3. Water quality complies with state water quality standards and achieves, or is making significant progress toward achieving established BLM management objectives such as meeting wildlife needs.

4. Habitats are, or are making significant progress toward, being restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal Proposed Candidate and other special status species.

The BLM developed the Wyoming Standards for Healthy Public Rangelands and Guidelines for Livestock Grazing Management (S&Gs) to achieve the four fundamentals of rangeland health detailed above. These Standards relate the minimal acceptable conditions for BLM administered public rangelands, including the health, productivity, and sustainability of the land. Observing, measuring, and monitoring field conditions of range sites, on a watershed scale, determine whether a Standard is being achieved. In accordance with the grazing regulations, if livestock grazing practices are found to be contributing to a failure to meet a Standard, corrective action is developed and implemented before the next grazing season. Guidelines provide reasonable, responsible, and cost-effective management practices at the grazing allotment and watershed levels to attain and maintain rangeland Standards. These management practices either maintain existing desirable conditions or move rangelands toward statewide Standards within reasonable timeframes.

The six Standards for Healthy Public Rangelands are:

Standard 1: Within the potential of the ecological site (soil type, landform, climate, and geology), soils are stable and allow for water infiltration to provide for optimal plant growth and minimal surface runoff.

Standard 2: Riparian and wetland vegetation have structural, age, and species diversity characteristic of the state of channel success and is resilient and capable of recovering from natural and human disturbance in order to provide forage and cover, capture sediment, dissipate energy, and provide for ground water recharge.

Standard 3: Upland vegetation on each ecological site consists of plant communities appropriate to the site which are resilient, diverse, and able to recover from natural and human disturbance.

Standard 4: Rangelands are capable of sustaining viable populations and a diversity of native plant and animal species appropriate to the habitat. Habitats that support or could support threatened species, endangered species, species of special concern, or sensitive species will be maintained or enhanced.

Standard 5: Water Quality meets state standards.

Standard 6: Air Quality meets state standards.

The Buffalo RMP has been amended to adopt the Wyoming Standards for Healthy Rangelands. An assessment of the S&Gs has not yet been conducted for the Beebe Allotment, however an onsite visit by a BLM range technician on July 18, 2011 revealed good range condition and no marked resource problems. This allotment is a "C" category allotment, which is low priority for further evaluation (see Section 3.3). In 1998 the BFO developed a schedule for evaluating S&Gs. The allotments on this list are all in the "I" and "M" categories, which are highest priority for management and evaluation as described in the WY S&Gs Implementation Plan. Active management of category "C" isolated public lands is at a public cost and management effort largely beyond the scope of generating public benefit; see generally, Ted Lapis v. U.S., 178 IBLA 62 (2009).

1.5 Scoping and Issues

The BLM conducts its decision-making in accordance with the requirements of the Council on Environmental Quality (CEQ) regulations implementing the NEPA, and the Department of Interior (DOI) and BLM policies and procedures implementing NEPA. NEPA and the associated regulatory and policy framework require federal agencies to involve the interested public in their decision-making.

This EA received internal scoping. The identified issues are:

- How would the proposed action affect current livestock grazing management?
- Would the proposed action impact invasive species?
- Would and how would the proposed action affect any special status species, particularly sage-grouse (candidate species)?
- Would the proposed action impact migratory bird habitats or populations?
- Would the proposed action impact cultural resources and/or lands with wilderness characteristics?

This EA is sent to interested parties of record and is posted on the Buffalo Field Office (BFO) website to solicit public and cooperating agency comments over a 30-day period. The BFO uses received comments to assess whether the EA covers the issues raised and adequately addresses their significance. The BFO's response consists of either addressing public comments in the decision record or results in the preparation of a new EA.

2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 Alternative A – No Livestock Grazing

Under this alternative the BLM will not permit livestock grazing on the Beebe Allotment. The previous grazing lease will be cancelled in accordance with 43 CFR parts 4100 and 1600 to eliminate grazing on the allotment.

2.2 Alternative B- Proposed Action – Transfer of Grazing Preference and Issuance of Lease without Modification

The BFO proposes to maintain and improve land health and enhance habitat conditions on public lands within the BFO stewardship area by maintaining and/or enhancing upland grassland health and sagebrush habitats (species composition and structure) through existing livestock grazing management.

The BLM also proposes to transfer grazing privileges from Mike Curuchet to Beebe, LLC, and to issue a new 10-year term grazing lease to Beebe, LLC for the Beebe Allotment. There are no modifications to the current terms and conditions outlined in the existing lease held by Mike Curuchet. Table 1 lists the details of this BLM grazing lease.

Table 1

Allotment*	Livestock		Season of Use	% PL	AUMs	Type Use
	Number	Kind				
Beebe Allotment (02478)	1410	Sheep	6/01 – 9/23	10	107	Active

*BLM recognizes that this allotment consists primarily of non-federal lands. As such, BLM will not limit the season of use or number of livestock as long as grazing use is not to the detriment of the public lands. The lease schedule shown is primarily for billing purposes.

The proposed action will transfer grazing privileges to Beebe, LLC from Mike Curuchet and issue a new 10-year term grazing lease to Beebe, LLC. Both applicants are currently in good standing with the BLM and meet all mandatory qualifications for obtaining a grazing lease per 43 CFR 4110.1 and 4110.2. In accordance with Title 43 CFR 4130.2(a), "Grazing permits or leases shall be issued to qualified applicants to authorize use on the public lands and other lands under the administration of the BLM that are designated as available for livestock grazing through land use plans."

The applicant is not proposing any projects or other surface disturbing activities in connection to this lease transfer and issuance. The BLM will analyze any future range improvement projects associated with this allotment under separate, site-specific EAs.

3.0 AFFECTED ENVIRONMENT

3.1 Introduction

3.1.1 Location

The Beebe Grazing Allotment is about 25 miles northwest of Kaycee, Wyoming on the border of Washakie and Johnson Counties, along the crest of the south Bighorn Mountains. The allotment is a mixture of public and private lands. Private lands compose the majority of the allotment, with two parcels of BLM totaling 320 acres. There is no legal public access to the public lands in the allotment.

3.1.2 General Description

The Beebe Allotment is typical of the land forms, soils, and vegetation in the southern Bighorn Mountains. Differences in dominant species within the allotment vary with soil type, aspect, topography, and water availability. Annual precipitation and growing season are the principal factors limiting forage production. Lowlands with intermittent streams are the most productive

sites and the very steep escarpments, ridges, and slopes are the least productive. All stream channels found in the allotment are intermittent streams. This means that water flow generally occurs during spring runoff. No true wetland or riparian areas occur within the allotment.

The public land in this allotment is clearly lacking in wilderness characteristics due to its small size (less than 5,000 acres).

The soils within the Beebe Allotment vary greatly depending on topographic location, slope, elevation, and precipitation. The climate of the area is characterized by moderate amounts of precipitation, averaging between 15 and 19 inches annually. The majority of soils within this allotment are loams.

Wyoming big sagebrush is a significant component of the plant community associated with loamy sites, with densities ranging from 2-12% throughout the allotment. Cool-season mid-grasses make up the majority of the understory with the balance made up of short warm-season grasses, introduced annual grasses, and miscellaneous forbs. The dominant cool season mid-grass species include green needlegrass (*Nassella viridula*), needleandthread (*Hesperostipa comata*), Idaho fescue (*Festuca idahoensis*), and rhizomatous wheatgrasses. Grasses can account for over 75% of the vegetation in this type of ecological site. With an elevation of approximately 7600 feet, the growing season is short, consisting of the months of May through mid-August.

Historically, native plants in northeastern Wyoming evolved under prehistoric conditions which included grazing and browsing by bison and other native ungulates, and an associated low frequency of fire. This community is well suited to grazing by both domestic livestock and wildlife year round.

3.1.3 Energy Development

The BLM permits federal mineral development (coal bed natural gas, conventional oil, and coal) in the PRB. This includes federal minerals below federal and/or private (split estate) surface. The BLM prepares EAs, as required by NEPA, for this federal mineral development. In general, companies submit proposals in the form of plans of development (PODs) that may consist of one to 200 wells. Currently the Beebe Allotment does not lie in any mineral development. Any future mineral development will be discussed in a separate EA.

This grazing lease transfer and issuance does not affect the following resources, which receive no further analysis:

Air Quality	Mineral Resources	Visual Resource Management
Areas of Critical Environmental Concern (ACEC)	Native American Religious Concerns	Water Quality and Prime or Sole Source of Drinking Water
Environmental Justice	Paleontology	Wetlands and Riparian Zones
Prime or Unique Farmlands	Recreation	Wild and Scenic Rivers
Flood Plains	Soils	Wilderness Values
Hazardous or Solid Wastes	Traditional Cultural Properties	

3.2 Cultural Resources

Class III inventory for cultural resources has not occurred on the allotment.

3.3 Livestock Grazing

In 1985, BLM established three categories for allotments to identify areas where management was potentially needed, as well as to prioritize workloads and the use of range improvement funds. The categories classify allotments as Improve Existing Resource Conditions (I), Maintain Existing Resource Conditions (M), or Custodial Management (C) (USDI 2008). The Beebe Allotment is a category "C" allotment, meaning its management is minimal in nature, due to the small amount of public land within the allotment. The BLM's rationale for this classification is that there are no identified resource problems, and the size and continuity of the public land is not conducive to more intensive management by the BLM. The allotment has a low potential for yielding a positive return on public investment in management or rangeland project development.

The Beebe Allotment consists of 320 acres of public land and 2341 acres of deeded land. There are 107 AUMs associated with the federal lands in the allotment. Grazing of public land parcels is in conjunction with deeded lands.

3.4 Invasive Species/Noxious Weeds

Invasive species and noxious weeds exist to a small degree in the affected environment. The primary species in the allotment are downy brome *(Bromus tectorum*) and Japanese brome (*Bromus Japonicus).* These *Bromus* species occur in such high densities and numerous locations throughout Northeast Wyoming that a control program is not considered feasible at this time. The presence of these weeds in the allotment is very limited.

3.5 Wildlife, Threatened & Endangered, Candidate and Sensitive Species

The BLM conducted wildlife evaluations to assess the occurrence of selected wildlife species and their habitats, as well as to evaluate the anticipated effects associated with issuance of this grazing lease on the Beebe Allotment. The evaluations included selected individual species or species groupings that are ecologically, economically, or socially important.

Evaluation methods included comparison of aerial imagery (1994 to 2009) and review of wildlife geospatial datasets (available at BFO). Datasets included occurrence information for big game, raptors, bald eagles, sage-grouse, sharp-tailed grouse, mountain plover, black-tailed prairie dogs, and sagebrush in the project area. A merlin was observed during an allotment visit on July 18, 2011.

Wildlife habitats occurring on the Beebe Allotment are results of a complex history of natural and man-caused influences. Important natural influences included short- and long-term climate variation, infrequent wildfire, and ungulate grazing; especially by bison (Baker 2006; Mack and Thompson 1982). From about 1880 to 1910, the removal of native bison, and their subsequent replacement with "vast numbers" of cattle and excessive numbers of sheep, greatly influenced the PRB, including the Beebe Allotment (Cassity 2007; Patterson 1952). The combined impacts of cattle and sheep overstocking and climate may have initiated the ongoing epicycle of gully erosion that is evident throughout the Basin (Leopold and Miller 1954). Enactment of the Taylor Grazing Act of 1934 repaired early range degradation and aided the recoveries of reduced wildlife populations (Patterson 1952).

The following tables summarize the affected environment relative to selected wildlife.

Table 2. Summary of Species Habitat and Project Effects.

Common Name (scientific name)	Habitat	Presence	Project Effects	Rationale
Amphibians				
Northern leopard frog (*Rana pipiens*)	Beaver ponds, permanent water in plains and foothills (SS Policy). Swampy, cattail marshes on the plains (WGFD CWCS).	NP	NI	Habitat not present.
Columbia Spotted frog (*Ranus pretiosa*)	Breeds in the shallows of lakes, ponds, marshes, and small streams (NatureServe).	NP	NI	Habitat not present
Birds				
Baird's sparrow (*Ammodramus bairdii*)	Grasslands, weedy fields (SS Policy). Un- or lightly grazed mixed-grass prairie, wet meadows, tallgrass prairie. Prairie w/ scattered low bushes and matted vegetation (NatureServe). In dry years, grassy slough bottoms, alkali flats, and depressions in low lying grasslands.	NP	NI	Suitable habitat not present at allotment's high elevation.
Bald eagle (*Haliaeetus leucocephalus*)	Mature forest cover often within one mile of large water body (SS Policy). Nests near large lakes and rivers in forested habitat where adequate prey and old, large-diameter cottonwood or conifer trees are available for nesting (WGFD CWCS). Migrating and wintering eagles congregate near open water areas where concentrations of prey are available, such as carcasses of ungulate species, and spawning areas for kokanee, trout, and other fish (WGFD CWCS).	NS	NI	Bald eagles are not expected to occur in the allotment. Individuals may occasionally forage in the area. The nearest sighting is approximately 24 miles away. Activities associated with ongoing livestock grazing operations are not likely to occur to such an extent that foraging behavior will be disrupted.
Brewer's sparrow (*Spizella breweri*)	Basin-prairie shrub (SS Policy). Closely associated with sagebrush shrublands that have abundant, scattered shrubs and short grass (WGFD CWCS).	NS	MIIH	Suitable habitat may be present. Trampling of nests may occur. Negligible impacts from livestock or humans disrupting breeding, dislodging nests, or causing adult to leave eggs or chicks unattended.
Burrowing owl (*Athene cunicularia*)	Grasslands, basin-prairie shrub (SS Policy). Prefers open prairie, grassland, desert, and shrub-steppe habitats, and may also inhabit agricultural areas. It depends on mammals that dig burrows, which it uses for nesting, roosting, and escape (WGFD CWCS).	NS	BI	Burrowing owls prefer grazed areas and use cow manure to line their nests.
Ferruginous hawk (*Buteo regalis*)	Basin-prairie shrub, grasslands, rock outcrops (SS Policy). Semi-arid open country, primarily grasslands, basin-prairie shrublands, and badlands (WGFD CWCS). Requires large tracts of relatively undisturbed rangeland and nests in rock outcrops, the ground, cutbanks, cliff ledges, or trees (WGFD CWCS).	S	NI	Ferruginous hawks may forage in this area. Livestock activity should not affect foraging behavior.
Loggerhead shrike (*Lanius ludovicianus*)	Basin-prairie shrub, mountain-foothill shrub (SS Policy). Grasslands interspersed with scattered trees and shrubs that provide nesting and perching sites.	S	MIIH	Ongoing livestock operations will not result in reduced shrub cover or habitat fragmentation. Nests may be toppled by livestock.
Long-billed curlew (*Numenius americanus*)	Grasslands, plains, foothills, wet meadows (SS Policy). Inhabits a variety of grassland types ranging from moist meadow grasslands to agricultural areas to dry prairie upland, usually near water. Prefers a complex of shortgrass prairies,	NS	MIIH	Marginally suitable habitat may be present. Nests and individuals could be trampled.

Common Name (scientific name)	Habitat	Presence	Project Effects	Rationale
	agricultural fields, wet and dry meadows and prairies, and grazed mixed-grass and scrub communities. Nests on the ground in habitat that includes grass <12", bare ground, shade, abundant invertebrate prey, and a minimum on 40 acres of suitable habitat (WGFD CWCS).			
Migratory bird species (Various)	Multiple vegetation types are used for breeding, foraging and wintering, with habitat types ranging from grasslands and shrub-steppe to woodlands and riparian areas.	K	MIIH	Trampling of nests may occur. Negligible impacts from livestock or humans disrupting breeding, dislodging nests, or causing adult to leave eggs or chicks unattended. Ongoing livestock operations should not create significant additional impacts.
Mountain plover (*Charadrius montanus*)	Short-grass prairie with slopes < 5% (SS Policy). Low, open habitats such as arid shortgrass and mixed-grass prairies dominated by blue grama and buffalo grass with scattered clumps of cacti and forbs, and saltbush habitats of the shrub-steppe. Prefers to nest in large, flat grassland expanses with sparse, short vegetation (<=4") and bare ground. Adapted to areas that have been disturbed by prairie dogs, heavy grazing, or fire (WGFD CWCS).	S	MIIH	Suitable plover habitat is present nearby. Birds may prefer grazed areas. Nests may be trampled.
Northern goshawk (*Accipiter gentilis*)	Conifer and deciduous forests (SS Policy). Mixed coniferous habitat of a wide variety of ages, structural conditions, and successional stages. Nests in mature stands with multilayered canopies with open understory, small openings, and water within 0.25 miles. Nest stands often on slopes with northerly exposures or in drainages or canyon bottoms protected by such slopes. Post-fledging area is a mosaic of forest types that provide hiding cover and abundant prey. Foraging area may include a variety of forest types and structures but most often consists of forests with a high density of large trees, high canopy closure, high basal area, and relatively open understories, interspersed w/ shrublands and openings with perching trees to observe prey. Winter habitat probably includes a variety of vegetation types, such as forests, woodlands, shrublands, and forested riparian strips (WGFD CWCS).	S	NI	Suitable habitat is present within and near the allotment. Ongoing livestock operations should not affect goshawks.
Peregrine falcon (*Falco peregrinus*)	Cliffs (SS Policy). Forages in open woodlands and forests, shrub-steppe, grasslands, marshes, and riparian habitats. Nests in cliffs that are usually proximate to habitats with abundant prey (WGFD CWCS).	S	NI	Nest substrate may be present. No known breeding pairs in proximity. Ongoing livestock operations should not affect this species.
Plains Sharp-Tailed Grouse (*Tympanuchus phasianellus jamesi*)	Short and mixed-grass prairie, sagebrush shrublands, woodland edges, and river canyons. Common where grasslands are intermixed with other shrublands, especially wooded draws, shrubby riparian area, and wet meadows. Diets include a variety of forbs, grasses and insects. In winter,	NS	MIIH	Properly managed grazing will maintain quality cover and habitat. Nests or chicks may occasionally be trampled. Ongoing livestock operations are not likely to change use of this area by Sharp-tailed

Common Name (scientific name)	Habitat	Presence	Project Effects	Rationale
	sharp-tailed grouse also feed on buds and catkins of deciduous trees or shrubs and berries. Birds are also known to feed on the buds of aspen and willow.			grouse.
Sage sparrow (*Amphispiza billneata*)	Basin-prairie shrub, mountain-foothill shrub (SS Policy). Considered a sagebrush obligate. Inhabits prairie and foothills shrubland habitat where sagebrush is present. Prefers shrublands with tall shrubs and low grass cover, where sagebrush is clumped in a patchy landscape. Requires a large block of unfragmented habitat to successfully breed and survive (WGFD CWCS).	S	MIIH	Nests may be trampled. Cover will be affected.
Sage thrasher (*Oreoscoptes montanus*)	Basin-prairie shrub, mountain-foothill shrub (SS Policy). Considered a sagebrush obligate. Inhabits prairie and foothills shrubland habitat where sagebrush is present. Prefers shrublands with tall shrubs and low grass cover, where sagebrush is clumped in a patchy landscape (WGFD CWCS).	S	MIIH	Nests may be trampled. Uncommon cowbird host, which are associated with cattle. May be more susceptible to higher parasitism pressure.
Trumpeter swan (*Cygnus buccinator*)	Lakes, ponds, rivers (SS Policy). Inhabits shallow marshes, ponds, lakes, and river oxbows. Prefers stable, quiet, and shallow waters where small islands, muskrat houses, or dense emergent vegetation provide nesting and loafing sites. Nutrient-rich water, with dense aquatic plant and invertebrate growth, provide the most suitable habitat. Winter habitat must provide extensive beds of aquatic plants that remain ice-free. In Wyoming, cold temps and ice restrict trumpeters to sites where geothermal waters, springs, or outflow from dams maintain ice-free areas (WGFD CWCS).	NP	NI	Habitat not present.
White-faced ibis (*Plegadis chihi*)	Marshes, wet meadows (SS Policy). Inhabits marshes, wet-moist meadows, lakes, and irrigated meadows. Nests on the ground in bulrushes, cattails, or reeds; on a floating mat; or in a low tree.	NP	NI	Habitat not present.
Yellow-billed cuckoo (*Coccyzus americanus*)	Open woodlands, streamside willow and alder groves (SS Policy). Nests primarily in large stands of cottonwood-riparian habitat below 7000 feet, including such habitats that occur in urban areas. It is a riparian obligate species that prefers extensive areas of dense thickets and mature deciduous forests near water, and requires low, dense, shrubby vegetation for nest sites.	NP	NI	Habitat not present.
Fish				
Yellowstone cutthroat trout (*Oncoryhynchus clarki bouvieri*)	Mountain streams and rivers in Tongue River drainage	NP	NI	Habitat not present.
Mammals				
Black-tailed prairie dog (*Cynomys ludovicianus*)	Prairie habitats with deep, firm soils and slopes less than 10 degrees (SS Policy). Inhabits dry, flat, open, shortgrass and mixed-grass grasslands with low, relatively sparse vegetation, including areas overgrazed by cattle. Constructs burrows in fine to medium soils (WGFD CWCS).	NS	BI	Prairie dogs often prefer habitats grazed by livestock.

Common Name (scientific name)	Habitat	Presence	Project Effects	Rationale
Fringed myotis (*Myotis thysanodes*)	Conifer forests, woodland chaparral, caves and mines (SS Policy). Found in a wide range of habitats, including coniferous forests, woodlands, grasslands, and shrublands. Probably most common in xeric woodlands, such as juniper, ponderosa pine, and Douglas-fir. Typically forages over water, along forest edges, or within forests and woodlands. During summer, uses a variety of roosts, including rock crevices, tree cavities, caves, abandoned mines, and buildings. During winter, it hibernates in caves, abandoned mines, and buildings (WGFD CWCS). Must remain within commuting distance of drinking water. Roosts in rock crevices that typically face southeast or southwest and are in low elevation forests or woodlands (WGFD Bat Conservation Plan).	S	NI	Habitat present. Availability of roost sites is unknown, but individuals are likely to forage in the area. Livestock operations should not affect foraging behavior.
Long-eared myotis (*Myotis evotis*)	Conifer and deciduous forest, caves and mines (SS Policy). Primarily inhabits coniferous forest and woodland, including juniper, ponderosa pine, and spruce-fir. Typically forages over rivers, streams, and ponds within the forest-woodland environment. During summer, it roosts in a wide variety of structures, including cavities in snags, under loose bark, stumps, buildings, rock crevices, caves, and abandoned mines. During winter, it probably hibernates primarily in caves and abandoned mines (WGFD CWCS). Occasionally found in cottonwood riparian areas, basins, and sagebrush grasslands where roost sites are available (WGFD Bat Conservation Plan). Most likely found in areas close to a water source. May also occur more frequently in suitable habitat near rock outcroppings or cliffs. Primarily forages over rivers, streams, and ponds within the forest-woodland environment. Also forages over open areas such as campgrounds, small forest openings, and edges, although foraging areas are most likely to be close to a water source. Large-diameter conifer snags provide primary roosting habitat (WGFD Bat Conservation Plan).	S	NI	Habitat present. Livestock operations should not affect foraging behavior. Roosting individuals may be trampled.
Spotted bat (*Euderma maculatum*)	Cliffs over perennial water (SS Policy). Occupies a wide variety of habitats, from desert scrub to coniferous forest. Most often observed in low deserts and basins and juniper woodlands. Roosts in cracks and crevices in high cliffs and canyons. May occasionally roost in buildings, caves, or abandoned mines, although cliffs are the only roosting habitat in which reproductive females have been located (WGFD CWCS). Often occurs in association with canyons, prominent rock features, and permanent water sources. In desert environments, it forages in canyons, in the open, or over riparian vegetation. All recorded occurrences of spotted bats in WY were close to a permanent water source (WGFD Bat Conservation Plan).	NP	NI	Perennial water sources not present.

Common Name (scientific name)	Habitat	Presence	Project Effects	Rationale
Swift fox (*Vulpes velox*)	Grasslands (SS Policy). Inhabits shortgrass and mixed-grass prairies. Often uses highway and railroad ROWs, agricultural areas, and sagebrush-grasslands. Closely associated w/ prairie dog colonies and uses underground dens year-round. Selects habitat with low-growing vegetation, relatively flat terrain, friable soils, and high den availability (WGFD CWCS).	S	MIIH	Inappropriate grazing could reduce hiding cover and increase susceptibility to predation.
Townsend's big-eared bat (*Corynorhinus townsendii*)	Caves and mines (SS Policy). Occupies a variety of xeric to mesic habitats, including coniferous forests, juniper woodlands, deciduous forests, basins, and desert shrublands, and is absent only from the most extreme deserts and highest elevations. Requires caves or abandoned mines for roost sites during all seasons and stages of its life cycle, and its distribution is strongly correlated with the avaiilability of these features (WGFD CWCS). May be limited to areas with reliable, accessible sources of drinking water. Forages primarily along forest and woodland edges, riparian corridors, and in open areas near wooded habitat. May avoid open, grazed pasture land.	S	NI	Availability of roost sites is unknown, but foraging habitat is present. Ongoing livestock grazing unlikely to affect prey abundance or availability of foraging habitat.
Plants				
Limber Pine (*Pinus flexilis*)	High-elevation pine, often marking the tree line either on its own, or with Whitebark Pine (*Pinus albicaulis*), either of the Bristlecone pines, or Lodgepole Pine (*Pinus contorta*). Found in steeply-sloping, rocky and windswept terrain in the Rocky Mountains.	S	MIIH	Limber pine may be present in association with conifer species. Livestock may forage on young seedlings.
Porter's sagebrush (*Artemisia porteri*)	Sparsely vegetated badlands of ashy or tufaceous mudstone and clay slopes 5300-6500 ft.	NP	NI	Habitat not present
William's wafer parsnip (*Cymopterus williamsii*)	Open ridgetops and upper slopes with exposed limestone outcrops or rockslides, 6000-8300 ft.	S	MIIH	Suitable habitat is present in the allotment. Individual plants may be grazed or trampled.

Presence
K - Known, documented observation within project area.
S - Habitat suitable and species suspected, to occur within the project area.
NS - Habitat suitable but species is not suspected to occur within the project area.
NP - Habitat not present and species unlikely to occur within the project area.

Project Effects
NI - No Impact.
MIIH - May Impact Individuals or Habitat, but will not likely contribute to a trend towards Federal listing or a loss of viability to the population or species.
WIPV - Will Impact Individuals or Habitat with a consequence that the action may contribute to a trend towards Federal listing or cause a loss of viability to the population or species.
BI - Beneficial Impact

Table 3. Summary of Threatened and Endangered Species Habitat and Project Effects

Common Name (scientific name)	Habitat	Presence	Project Effects	Rationale
Endangered				
Black-footed ferret (*Mustela nigripes*)	Black-tailed prairie dog colonies or complexes > 1,000 acres.	NP	NE	Habitat not present. No prairie dog colonies of sufficient size.
Threatened				
Ute ladies'-tresses orchid (*Spiranthes diluvialis*)	Riparian areas with permanent water	NP	NE	Habitat not present
Candidates for listing				
Greater sage-grouse (*Centrocercus urophasianus*)	Basin-prairie shrub, mountain-foothill shrub (SS Policy). Also includes wet-moist meadows, and alfalfa and irrigated meadows when adjacent to sagebrush (WGFD CWCS).	K	MIIH	BLM land provides suitable brood-rearing and summer habitat. Females and/or chicks may occasionally be trampled. The nearest leks are 4.5 miles away. Ongoing livestock operations are not likely to change current use of this area by sage-grouse.

Presence
K - Known, documented observation within project area.
S - Habitat suitable and species suspected, to occur within the project area.
NS - Habitat suitable but species is not suspected to occur within the project area.
NP - Habitat not present and species unlikely to occur within the project area.

Project Effects
LAA - Likely to adversely affect
NE - No Effect
NLAA - May Affect, not likely to adversely affect individuals or habitat.
NLJ – Not likely to jeopardize continued existence
MIIH – May impact individuals and habitat
NP—Habitat not present and species unlikely to occur within the project area.

3.5.1 Candidate Species

This environmental assessment discusses Greater sage-grouse (sage-grouse) in detail because they are classified as a candidate species, currently warranted for listing under the Endangered Species Act (USFWS 2010) and are thus of heightened management concern in the BFO. Sage-grouse are also a Wyoming BLM sensitive species and a WGFD Species of Greatest Conservation Need (SGCN).

Sage-grouse habitat is present on BLM lands in the Beebe allotment. Habitat models indicate that BLM lands in the allotment contain brood-rearing and summer habitat (Doherty et al. 2007, Doherty 2008). There are no known leks in the allotment, but the Mazet #2 and Otter Creek Vee leks are, respectively, 4.5 and 5 miles to the west.

This area provides habitat and possible breeding ground for a number of sage-grouse that reside at high elevations in the southern Bighorn Mountains during the summer months. Two of these birds were captured and fitted with radio collars in the Beebe allotment in September 2009. Both birds, one male and one female, were in the allotment on later dates of the same year and likely spent the winter on the west slope of the Bighorn Mountains (BLM 2011).

4.0 ENVIRONMENTAL EFFECTS

This section describes the environmental effects of the no action alternative (Alternative A), and those of the proposed action, Alternative B. The effects analysis addresses the direct and indirect effects of implementing the proposed action, the cumulative effects of the proposed action combined with reasonably foreseeable federal and non-federal actions, identifies mitigation measures, and discloses any residual effects.

4.1 Direct and Indirect Effects

4.1.1 Cultural Resources

Alternative A- No Grazing

The absence of grazing will not result in impacts to cultural resources.

Alternative B- Preference Transfer & Lease Issuance

Any activity that removes vegetation or leads to soil erosion can cause impacts to cultural resources. Livestock concentration areas (such as those that form near water sources, supplemental feeding areas, fence corners, etc.) and livestock trail formation may result in impacts to cultural resources. According to the State Protocol Agreement between the Wyoming BLM and the Wyoming SHPO, grazing lease renewals that do not include seasonal grazing changes or changes in livestock types are exempt from case-by-case review. As per Appendix B item #27 and following section IV(A)(3) of the Wyoming State Protocol, on September 19, 2011 the Bureau electronically notified the Wyoming State Historic Preservation Office (SHPO) of this grazing lease renewal.

4.1.2 Livestock Grazing

Alternative A- No Grazing

FLPMA requires the BLM to manage public lands and resources according to the principals of multiple use and sustained yield and recognizes the Nation's need for domestic sources of

minerals, food, timber, and fiber. FLPMA also requires the BLM—except in cases of emergency—to give two years' notification when an authorization for domestic livestock grazing is cancelled, in whole or in part, to devote the associated lands to another public purpose, including disposal.

The Buffalo RMP states as a resource management decision that *livestock grazing is allowed on all public lands in the resource area except on about 6,000 acres where it has been determined to be incompatible with other resource uses or values.*

There are no fences or natural barriers separating BLM and non-BLM lands. At this time, fencing out the public lands is not practical or cost effective. If extraordinary circumstances arise, such as the identification of an endangered plant or damageable cultural resource on the site, fencing may be a greater priority, and the BLM will address the matter in a separate EA. If the public lands are not leased, and subsequently not fenced, any livestock use occurring thereon is unauthorized. Selecting this alternative will affect how the adjacent private and state lands are grazed because the operator must keep livestock off public lands through herding or fencing, or else be in violation of federal grazing regulations. The mixed ownership pattern in the BFO resource area makes herding difficult, in addition to the fact that herding does not ensure that public lands are not grazed. A rider needs to remain with livestock at all times. Because it is not economically feasible for the BLM to fence all federal land parcels, fences will likely be constructed on private land, fragmenting the area and making BLM unable to stipulate wire spacing to facilitate wildlife movement. Most four-strand fences on private land have a top wire of 46-48 inches with 10-12 inch wire spacing and all wires are barbed. In the absence of fences, the BLM must constantly supervise the public lands to assure they are not being grazed.

No adverse resource impacts resulting from livestock grazing have been identified which would warrant cancellation of all grazing on this allotment. The Buffalo RMP allows for adjustment of forage allocation based on an evaluation of monitoring, field observations, or other data as needed. Additionally, changes in grazing practices can be effective in mitigating impacts without a corresponding reduction in forage allocation.

Alternative B- Preference Transfer & Lease Issuance

Rangeland vegetation inventory data (MRB 1957) and a July 2011 onsite visit by a BLM range technician data indicate that an adequate amount of forage is available to support the proposed number of livestock and for wildlife use and the effects of that use within this allotment. The new grazing lease authorizes the same numbers and kind of livestock and season of use as the existing lease. This action is not proposing any changes to grazing management. The BLM does not expect the issuance and transfer of the grazing lease to have any effects on range management.

4.1.3 Invasive Species/Noxious Weeds

Alternative A- No Grazing

Removing livestock grazing from the public land can promote growth—and potential overgrowth—of perennial grasses and forbs, thus crowding out or reducing the potential for invasion of noxious and/or invasive species. However, the overgrowth of vegetation increases the availability of fine fuels, which also increases the risk of wildfire. These fires would also be

more intense, allowing opportunistic noxious and invasive species to colonize the public lands. Cooperative weed control efforts could discourage overgrowth of vegetation and decrease the fire return interval.

Alternative B- Preference Transfer & Lease Issuance

Implementing appropriate grazing use, as described in the proposed action, along with ongoing cooperative weed control efforts, benefits the health of the native plant community. A healthy native plant community often provides competition against the establishment and/or spread of noxious weeds. Issuing the grazing lease will not result in any additional impacts in relation to the spread of noxious weeds.

4.1.4 Wildlife, Threatened & Endangered, Candidate and Sensitive Species

Alternative A- No Grazing

If grazing is removed from the allotment, there will be "no effect" on black-footed ferret and Ute ladies'-tresses orchid, because there is no suitable habitat for these species. Cancelling grazing may have a negative impact on mountain plover, burrowing owls, and black-tailed prairie dogs by reducing the number of grazed areas, which provide preferred habitat for these species.

Alternative B- Preference Transfer & Lease Issuance

(See tables in Section 3.5)

The proposed action will have "no effect" on black-footed ferret and Ute ladies'-tresses orchid, as suitable habitat for these species is not present in the allotment. The proposed action is may benefit mountain plover, because the birds prefer areas with little vegetative cover (Derner et al. 2009).

4.1.4.1 Candidate Species

Alternative A- No Grazing

Under the no grazing alternative, no benefits to sage-grouse habitat as a result of grazing management would occur. Excluding livestock does not necessarily cause an area to return to its pre-grazing ecological condition or guarantee improvements in species richness, diversity, or vegetative production (Manier and Hobbs 2007). Some habitats reach a threshold where livestock exclusion does not have an effect on the current trend (Wambolt and Payne 1986, Sanders and Voth 1983). Other research suggests that rest from livestock grazing in Wyoming big sagebrush habitats may improve understory production while decreasing sagebrush cover (Wambolt and Payne 1986). On Wyoming big sagebrush sites with dense sagebrush and annual grass understory, eliminating livestock grazing can increase fire risk which results in habitat degradation (Peters and Bunting 1994, West 1999).

Alternative B- Preference Transfer & Lease Issuance

The proposed action may impact greater sage-grouse. Livestock grazing can benefit or degrade sage-grouse habitat on the allotment, depending on the timing, stocking rate, and habitat affected. Fall grazing may favor upland forb production, and spring grazing may be used to remove herbaceous cover and make forbs more accessible (Smith et al. 1979, Fulgham et al. 1982). Spring and early summer grazing may help control invasive weeds and remove woody plants, thereby decreasing the risk of wildfire that could remove large areas of habitat (Mosley 1996, Olson and Wallander 2001, Meritt et al. 2001, Riggs and Urness 1989).

Excessive or poorly managed grazing causes degradation of sagebrush ecosystems and thus sage-grouse habitat (BLM 2002). Inappropriate grazing management in uplands can reduce perennial grasses and forbs while favoring annual grasses and increasing sagebrush cover (Branson 1985, Tisdale 1994, Beck and Mitchell 2000, Bork et al. 1998). This may impact sage-grouse, because they rely on perennial grasses for escape cover and residual herbaceous cover for screening cover in nesting habitat. Forbs are positively associated with survival and recruitment of sage-grouse chicks. Inappropriate grazing that damages meadows and riparian areas can harm sage-grouse, because these areas are critical for sage-grouse in late summer. Livestock may occasionally trample sage-grouse nests or cause sage-grouse to abandon their nests (Call 1979, Patterson 1952).

Livestock grazing has occurred historically on this allotment and the BLM expects no additional impacts, other than those that have already taken place as a result of long-term use, from implementation of the proposed action. Continuing to manage for the Wyoming Standards for Rangeland Health will promote sage-grouse habitat viability.

4.2 Cumulative Effects

Cumulative effects are those resulting from the incremental impact of an action when added to other past, present, or reasonably foreseeable actions regardless of what agency or person undertakes such other actions. Identified actions include noxious weed control and sage-grouse protection. BLM will address any negative grazing-related impacts, which result in nonattainment of rangeland health standards, before the start of the next grazing season as required by 43 CFR 4180.

The BLM will continue managing the Beebe Allotment to achieve the Wyoming Standards for Rangeland Health. All elements of the environment will benefit from rangelands in good health. The applicant is not proposing any projects or other surface disturbance in connection to this lease transfer and issuance, and the terms and conditions of the lease will remain the same. Thus any cumulative impacts resulting from the proposed action should be minor.

4.2.1 Noxious Weeds

Noxious weeds/invasive non-native plants are present in the assessment area to varying degrees. Livestock grazing may benefit certain weeds by reducing competition with grasses but may also help control other species through defoliation. Currently the BFO is addressing the situation by mapping weed locations and treating them with herbicides or bio-controls in conjunction with the local weed and pest organizations.

4.2.2 Sage-grouse

The sage-grouse population in northeast Wyoming is exhibiting a steady long term downward trend (WGFD 2008a, USFWS 2010). The figure below illustrates a ten-year cycle of periodic highs and lows. Each subsequent population peak is lower than the previous peak. Long-term harvest trends are similar to that of lek attendance (WGFD 2008b). Habitat fragmentation is the primary attributor to these declines (USFWS 2010).

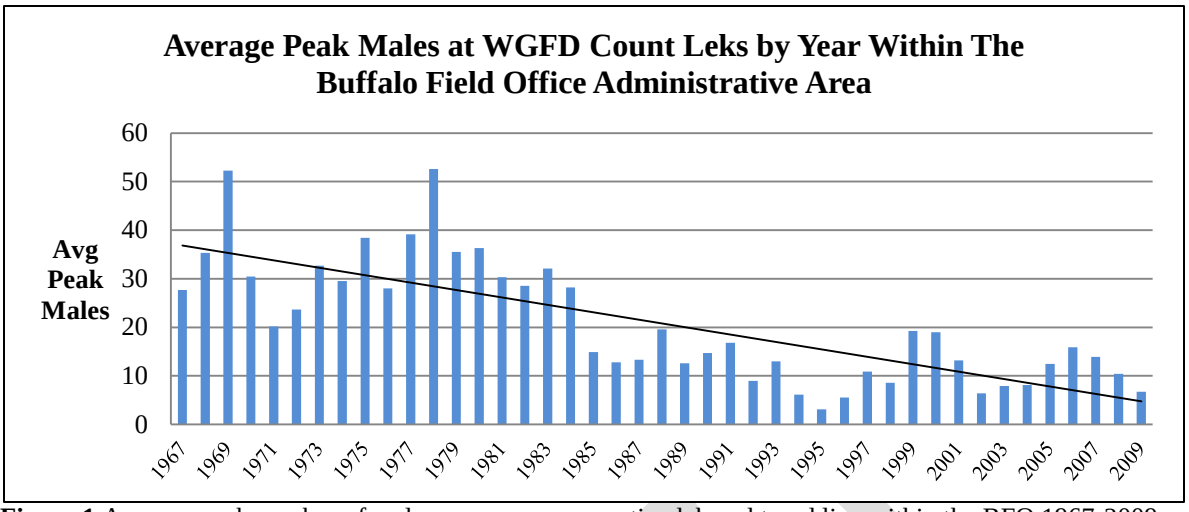

Figure 1 Average peak number of male sage-grouse per active lek and trend line within the BFO 1967-2009

4.3 Mitigation Measures Considered

The terms and conditions included as part of the term grazing lease will mitigate anticipated impacts. No additional mitigation measures are proposed.

4.4 Residual Effects

There are no residual impacts associated with the proposed action.

5.0 Tribes, Individuals, Organizations or Agencies Consulted

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